STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT

OIL CONSERVATION DIVISION

P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

Form C-122
Revised 10-1-78

dsf/e

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

RECEIVED
JAN 19 '90
O. C. D.
ARTESIA, OFFICE

Type Test: [X] Initial [ ] Annual [ ] Special				Test Date: 1-3-90	
Company: SANTA FE ENERGY			Connection: AIR		
Pool: ~~UNDESIGNATED~~ S. Culebra Bluff Atoka			Formation: ATOKA BANK		Unit:
Completion Date: 12-30-89		Total Depth: 13356	Plug Back TD: 13354	Elevation:	Farm or Lease Name: HARRON TRUST 30
Csg. Size: 4.5	Wt.: 13.5	d: 3.920	Set At: 13354	Perforations: From 12019 To 12030	Well No.: 1
Tbg. Size: 2.375	Wt.: 4.7	d: 1.995	Set At: 11967	Perforations: From To	Unit: O Sec.: 30 Twp.: 23S Rge.: 29E
Type Well – Single – Bradenhead – G.G. or G.O. Multiple: SINGLE - GAS			Packer Set At: 11957		County: EDDY
Producing Thru: TUBING	Reservoir Temp. °F: 188 @ 12025		Mean Annual Temp. °F: 60	Baro. Press. – P_a: 13.2	State: NM

L	H	Gg	% CO_2	% N_2	% H_2S	Prover	Meter Run	Taps
12025	12025	0.575	1.000	0.40	0	0	4.026	FLANG

NO.	FLOW DATA: Prover Line Size X Orifice Size	Press. p.s.i.g.	Diff. h_w	Temp. °F	TUBING DATA: Press. p.s.i.g.	Temp. °F	BHP DATA: Press. p.s.i.g.	Temp. °F	Duration of Flow
SI					3900	60	4993	188	72
1.	4.026 X 2.250	500	4	110	3635	60	4709	188	1
2.	4.026 X 2.250	505	7	103	3475	60	4535	188	1
3.	4.026 X 2.250	505	12.5	84	3175	60	4263	188	1
4.	4.026 X 2.250	505	24.5	62	2600	60	3736	188	1
5.									

RATE OF FLOW CALCULATIONS

NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P_m	Flow Temp. Factor Ft.	Gravity Factor Fg	Super Compress. Factor, Fpv	Rate of Flow Q, Mcfd
1	25.64	45.31	513.2	.9551	1.3188	1.0283	1505
2.	25.64	60.23	518.2	.9611	1.3188	1.0300	2016
3	25.64	80.48	518.2	.9777	1.3188	1.0343	2752
4.	25.64	112.68	518.2	.9981	1.3188	1.0403	3957
5.							

NO.	P_t	Temp. °R	T_r	Z
1	.76	570	1.64	.946
2.	.76	563	1.62	.943
3.	.76	544	1.56	.935
4.	.76	522	1.50	.924
5				

Gas Liquid Hydrocarbon Ratio 0 Mcf/bbl.
A.P.I. Gravity of Liquid Hydrocarbons 0 Deg.
Specific Gravity Separator Gas 0.575 XXXXXXXXX
Specific Gravity Flowing Fluid XXXXX 0.575
Critical Pressure 677 P.S.I.A. 677 P.S.I.A.
Critical Temperature 348 R 348 R

P_c 3942.2 P_c^2 15541

NO	P_t	P_w	P_w^2	$P_c^2 - P_w^2$
1	22299	3700	13693	1849
2	20686	3554	12628	2913
3	18286	3327	11067	4474
4	14057	2896	8387	7154
5				

(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 2.1725$ (2) $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 1.7843$

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2}\right]^n = 7060$

Absolute Open Flow 7060 Mcfd @ 15.025 Angle of Slope θ 53.3 Slope, n .746

Remarks: CHOKE SIZES: 1ST RATE 6.5/64 2ND RATE 8.5/64 3RD RATE 11/64 4TH RATE 15/64

Approved By Division	Conducted By:	Calculated By:	Checked By:
	C & W WIRELINE dba BENNETT-CATHEY	MATT LEE	